

MODULE HANDBOOK

GENERAL GEOLOGY					
Module/Course Title	Student Workload	Credits	Semester	Frequency	Duration
8720202062	2 CU X 14 X 170'= 90,6618	2 CU 3.18 ECTS	1 TH SEMESTER	ONCE YEAR	1 SEMESTER
1	Types of courses LECTURES PRACTICUM	Contact hours (2CU X 1,59 ECTS) X{(50:170')X 28,51 Workhours= 26,64	Independent Study (2CU X 1,59 ECTS) X{(60:170')X 28,51 Workhours= 31,96	Structured Study (2CU X 1,59 ECTS) X{(60:170')X 28,51 Workhours= 31,96	Class size MAX 38 STUDENT
2	Prerequisites for participation (if applicable) -				
3	Program Learning outcomes				
	<p>PLO 2 Able to analyze regional and regional characteristics (regionalization) in the context of resources and disasters based on the principles and approaches of geography to support sustainable development</p>				
	<p>PLO 6 Able to make appropriate decisions in the context of problem solving in geography and geography education, based on the results of information and data analysis</p>				
	<p>PLO 8 Able to formulate, process, analyze data, and present geosphere information both physical and human aspects by using geospatial technology for geography learning and research.</p>				
	<p>PLO 11 Demonstrate a responsible attitude towards work in the field of expertise independently</p>				

	<p>CLO</p> <ol style="list-style-type: none"> 1. Able to be responsible for independently analyzing various characteristics of the earth (CLO-2) 2. Able to solve problems related to exogenous forces, endogenous forces as well as geological and fossil structures based on information and data analysis. (CLO-6) 3. Able to process, analyze, and present data on exogenous forces, endogenous forces, and geological structures using geospatial technology for research. (CLO-8) 4. Able to analyze the characteristics of the geological structure in an area to support sustainable development. (CLO-11)
4	<p>Subject aims/Content</p> <ol style="list-style-type: none"> 1. Scope of Geology, Origin of the Earth, Properties of the Earth and Structure of the Earth. 2. Weathering, including understanding and causes of weathering, factors that affect weathering and types of weathering 3. Erosion, including understanding and various types of erosion, landform due to erosion 4. Deposition, including the understanding of the spread of deposition and the formed landform 5. Tectonism, including the theory of plate tectonics, plate movement and the consequences of plate movement. 6. Volcanism, including definition and eruption, types of eruption and impact of volcanic eruption 7. Seismic/Earthquake, including understanding, types of earthquakes, the impact of earthquakes, terms in earthquakes 8. Folds, understanding folds, processes and types of folds 9. Faults, definition and process of fractures, types of fractures, signs of fractures, shortening and elongation of fractures 10. Layering areas, including inclined planes, unconformity 11. Joint, Cleavage, Lamination, Foliation. 12. Geological Laws 13. Geological Time Scales and Fossil
5	<p>Teaching methods <i>Project Base Learning,</i></p>
6	<p>Assessment methods <i>paper test</i></p>
7	<p>This module/course is used in the following study programme/s as well -</p>
8	<p>Responsibility for module/course COMPULSORY/ELECTIVE*/</p> <ol style="list-style-type: none"> 1. Afnimar, 2009, Seismologi, Bandung, Penerbit ITB 2. Fossen. H., 2015, Structural Geology, Glasgow, Cambridge University Press 3. Santoso, D., 2002, Pengantar Teknik Geofisika, Bandung, Penerbit ITB 4. Sukandarrumidi, Kotta, H.Z., Maulana, F.W., 2014, Geologi Umum Bagian Pertama, Yogyakarta, Gadjah Mada university Press 5. Sukandarrumidi, dkk, 2017, Geologi Umum Bagian Kedua, Yogyakarta, Gadjah Mada university Press

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| | <ol style="list-style-type: none">6. Petersen, J.F., Sack, D., Gabler, R.E., 2012, <i>Physical Geography 10th Edition</i>, Canada, Brooks/Cole, Cengage Learning7. Schmincke, H. U., 2006, <i>Volcanism</i>, Berlin Heidelberg, Springer8. Sutedjo, A., 2017, <i>Geologi Struktur . Buku Ajar</i>, Surabaya, FIS Unesa9. Mulyaningsih, S., 2013, <i>Pengantar Geologi Lingkungan</i>, Yogyakarta, Panduan.10. Suharyadi, 2006, <i>Geologi Teknik</i>, Yogyakarta, Biro Penerbit Teknik sipil Universitas Gadjah Mada.11. Wicander and Monroe, 2013, <i>Geol 2. Student Edition</i>, Canada, Brooks/Cole, Cengage Learning |
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